### PATENT COOPERATION TREATY

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference SJ-12178WO	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/CA2004/001475	International filing date (day/month/year) 16 August 2004 (16.08.2004)	Priority date (day/month/year) 01 October 2003 (01.10.2003)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant LUPKE, Manfred, A., A.				

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1.	<ol> <li>This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).</li> </ol>					
2.	This REPORT consists of a total of 5 sheets, including this cover sheet.					
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.					
3.	This report contains indications	relating to the following item	ıs:			
	Box No. I	Basis of the report				
	Box No. II	Box No. II Priority				
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
	Box No. IV	Lack of unity of invention				
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
	Box No. VI	Certain documents cited				
	Box No. VII	Certain defects in the international application				
	Box No. VIII	Certain observations on the international application				
4.	<ol> <li>The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).</li> </ol>					
			Date of issuance of this report 03 April 2006 (03.04.2006)			
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland		lombettes	Authorized officer Athina Nickitas-Etienne			
Facsimile No. +41 22 740 14 35			elephone No. +41 22 338 89 95			

Form PCT/IB/373 (January 2004)

### PATENT COOPERATION TREATY

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From the INTERNATIONAL SEARCHING AUTHORITY

DENNISON ASSOCIATES 301 - 133 Richmond Street West TORONTO, Ontario Canada, M5H 2L7

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (date/month/year)

21 January 2005 (21-01-2005)

Applicant's or agent's file reference SJ-12178WO		FOR FURTHER ACTION See paragraph 2 below		
International application no PCT/CA2004/001475 International filing d 16 August 2004 (16-		date (date/month/year) ) i-08-2004)	Priority date (date/month/year) 01 October 2003 (01-10-2003)	
International Patent Classification (IPC) or both national classification and IPC IPC [7]: B29C 33/34, B29C 47/00, B29D 23/00				
Applicant LUPKE, MANFRED A. A. ET AL				

1. This opinion contains indications relating to the following items:				
	[x]	Box No. I	Basis of the opinion	
	[]	Box No. II	Priority	
	[]	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
	[]	Box No. IV	Lack of unity of invention	
	[x] .	Box No. V	Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
•	[]	Box No. VI	Certain documents cited	
	[]	Box No. VII	Certain defects in the international application	
	[x]	Box No. VIII	Certain observations on the international application	
2. FURTHER ACTION				

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ Commissioner of Patents Canadian Patent Office Box PCT, Ottawa/Gatineau K1A 0C9

Authorized officer

Pengfei Zhang (819) 953-0654

Facsimile No. (819) 953-9538

Form PCT/ISA/237 (cover sheet) (January 2004)

### WRITTEN OPINION OF THE

	INTERNATIONAL SEARCHING AUTHORITY	PCT/CA2004/001475
Box No. 1	Basis of this opinion	
1.With reg language	gard to the language, this opinion has been established on the basis of the in which it was filed, unless otherwise indicated under this item.	nternational application in the
[ ]	This opinion has been established on the basis of a translation from the or language, which is the language of a translation furnished for the purp. Rules 12.3 and 23.1(b)).	riginal language into the following oses of international search (under
2. With re the claime	gard to any nucleotide and/or amino acid sequence disclosed in the interr d invention, this opinion has been established on the basis of:	national application and necessary to
a. type of	material	
[]	a sequence listing	
[]	table(s) related to the sequence listing	
b. format	of material	
[ ]	in written format	
[]	in computer readable from	••
c. time of	filing/furnishing	• •
[]	contained in the international application as filed.	•
[]	filed together with the international application in computer readable form	
[]	furnished subsequently to this Authority for the purposes of search.	
3.[ ] In add filed or fur the applica	lition, in the case that more than one version or copy of a sequence listing a nished, the required statements that the information in the subsequent or ad- tion as filed or does not go beyond the application as filed, as appropriate, v	nd/or table relating thereto has been ditional copies is identical to that in were furnished.
	al comments:	9 A.
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#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CA2004/001475

Box No. V reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement			
Novelty (N)	Claims	1-17	YES
	Claims		NO
Inventive step (IS)	Claims	1-17	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-17	YES
2 Civil	Claims		NO

#### 2. Citations and explanations:

CA2,403,223A1 (LUPKE, M. A. A. et al.) 11 March 2004 (11.03.04) US4,492,551 (HEGLER, W. et al.) 8 January 1985 (08.01.85) CA2,468,268A1 (FLOYD, G. S. et al.) 10 July 2003 (10.07.03) JP8,103,948A (NAKAMURA, Y. et al.) 23 April 1996 (23.04.96) D2:

D3:

D4:

None of the prior art documents disclose the specific combination of features as claimed. In particular, in independent claim 1, the claimed apparatus comprises a moving mold that is surrounded by an air block housing to define a cooling chamber. Cooling air is introduced inside the chamber to cool the mold. The claimed apparatus differs from the prior cooling apparatus in that the moving mold is cooled by directly exposing mold blocks to cooling air inside of the cooling chamber. D1 or D2 discloses an apparatus having a moving mold; wherein mold blocks are cooled by cooling water. D3 (fig. 16, and page 15, line 23-30) or D4 (figs. 3-8) teaches an apparatus for cooling a molded product, wherein the molded product is directly exposed to cooling air inside of an air chamber. Therefore, the subject matter defined in claims 1-17 meet the criteria set forth in PCT Article 33(2)-(4) for novelty, inventive step and industrial applicability.

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CA2004/001475

Box No. VIII

Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Each main technical feature mentioned in the abstract and illustrated by a drawing in the international application shall be followed by a reference sign placed between parentheses (Article 8 (d)).

Form PCT/ISA/237 (Box No. VIII) (January 2004)